## D-R-A-F-T

# Proposed Agenda

## For The

## USEPA/USACE/USBR Columbia-Snake Modeling Worksession September 25<sup>th</sup> and 26<sup>th</sup>

The Edith Green-Wyatt Federal Building 1220 SW 3rd Ave, Conference room 622 Portland, OR

Day One: Tuesday September 25th

- B. Geographic Area of Modeling Effort
- C. Boundary Conditions-Temperatures at Canadian border; Tributary Inputs to Main Stem, etc.
- D. Point and Nonpoint Inputs
- E. Baseline Assumptions: Dams In or Out? Current ESA Requirements in.

A. Need for/Role of Interdisciplinary/Interagency Modeling Team

- F. One vs. Two Dimensional Model
- G. Years to be simulated: Wet, Average, Dry-All Seasons
- H. Daily or hourly time step
- I. Land Use Information/Associated Loading Rates
- J. Complexity/Equity of Allocation Scheme
- K. Data Requirements/Current Adequacy-Additional Needs?
- L. Analytical Direction: Top-Down vs. Bottom-up
- M. Need to Predict/Allocate Sources/Magnitude of Other Impairments, In Addition to Temperature
- N. Desired Outputs/Interpretation/Reporting: Timing & Resourcing Implications
- O. Stakeholder Involvement in Scoping Modeling Capabilities/Understanding Analytical Constraints.
- P. Potential External Peer Review of Modeling Considerations/Needs/Capabilities

#### V. APPLYING THE NEW PREDICTIVE TOOL

- A. Stakeholder Input to Development of Analytical Approaches & Management Scenarios
  - B. Understanding Implementation Issues/Realities/Challenges
    - 1. Achievability and Potential Need for UAA Process or other CWA relief
    - 2. Specific Opportunities for Temperature Improvement
      - e.g., Grand Coulee, Hells Canyon

# VI. DEVELOPING A COMPREHENSIVE TMDL APPROACH: Alternative Strategies for completing TMDL

- A. Break into multiple TMDLs that are sequenced
  - 1. Grand Coulee temperature TMDL
    - major temp impact
    - feasible options e.g., powerhouse switch
      - first dam in USA on Columbia
    - single model for reservoir
      - PSU W2 model a possibility
  - 2. Grand Coulee to Chief Joseph TMDL
    - same advantages as above
    - covers tribal waters (Colville and Spokane)
  - 3. Snake River temperature TMDL
    - different options for scope e.g., include HC Complex?
    - HC Complex and Snake Dams major temp impact
    - OR/ID TMDL does not address WA border impact
    - Solidify Dworshak ops as CWA and ESA compliant
  - 4. Balance of Columbia River TMDL
  - B. Simplify the TMDL e.g., group the Loading Analysis in a systems/sub-regional context
  - C. Aggregate Impairments (pursue potential co-variance) and analyze as multiple sequential TMDLs (per A above)
  - D. Aggregate Impairments (pursue potential co-variance) and group the Loading Analysis in a systems/sub-regional context (per B above)

### VI. INTERPRETING/REPORTING/APPLYING THE MODEL OUTPUTS

- A. Interpretation: Interdisciplinary/Interagency Team
- B. Potential External Peer Review of Team Interpretation
- C. Reporting: Engage Stakeholders, General Public, Decision Makers

### VII. DEVELOPING BASIN-WIDE TMDLS

- A. Identifying the Federal Dam Operators Share. Once the Federal Dam share of basin impairment is fairly/comprehensively addressed via loading allocation, assess what portion of their share of the total impairment is economically/technically feasible to manage?
- B. Achieving Balance Among Federal Programs/Requirements. Application of Outputs: Integrating Model Outputs in the Context of Achieving a Mutually Supportive Approach: Optimizing Congressionally Authorized Dams and Their Operations, the Clean Water Act Requirements and the Threatened and Endangered Species Act Requirements
- C. Utilize a systems/subregional/watershed-based approach to integrate Model Outputs Into a Comprehensive Series of Management Decisions in a consistent context across CWA, ESA requirements and Congressionally Authorized Dam Operations requirements.
- D. Adjust WQS to reflect economically/technically feasible compliance and practical, field based observations of system response and develop a sequential, incremental TMDL approach for Federal Dams in the Columbia-Snake River Basins.

# VIII. DEVELOPING A GAME PLAN

- A. NEAR-TERM (COMPLIANCE) Compliance Schedules, Variances, etc.
- B. LONG-TERM (MUTUALLY-SUPPORTING APPROACH TO OPTIMAL PROTECTION)-Adjust WQS to be attainable-base WQS on observed systems response to ambient conditions. Possibly site/reach/subwatershed-specific standards
- C. State and Stakeholder Input to Plan

### IX. OTHER ISSUES

- Washington State WQS
- Engaging the Forum (or whatever name we will apply to the group) in this effort/defining their role in the overall process
- TDG Related Issues
- Demos-Applegate/Willamette
- Utility of Independent Peer Review
- PR Plan-Pro-actively getting the word out-that there is life after the Fall Workshop